

CLAIMS

We claim:

- 5           1. A backup valve for use with a pool cleaner coupled to a source of water under pressure, comprising:  
            a housing having an inlet and at least a first outlet and a second outlet;  
            a timing apparatus directing water from said inlet to the first outlet or the second outlet; and  
10           an adjustable flow controller over the second outlet provided to increase the flow speed of fluid exiting the outlet.
2.     The backup valve of claim 1 wherein the flow controller comprises a securable plate.
- 15           3.     The backup valve of claim 2 wherein the plate includes a first bore having a diameter smaller than a diameter of said second outlet.
4.     The backup valve of claim 3 wherein the plate includes a second  
20           bore having a diameter equal to the diameter of said second outlet.
5.     The backup valve of claim 4 wherein the plate is secured in a first or second position by a user adjustable screw.
- 25           6.     The backup valve of claim 2 wherein the flow controller includes a flow control structure on the plate.

7. The backup valve of claim 4 wherein a ratio of the diameter of the second bore to the diameter of the first bore is about 3:1 to 1.1:1.

8. The backup valve of claim 7 wherein said ratio is about 1.6:1 to 1.4:1.

9. The backup valve of claim 6 wherein the flow control structure is a conical structure.

10. A fluid flow direction valve, comprising:  
a housing having an inlet coupled to a fluid supply, a first outlet and a second outlet;  
a valve structure positioned in the housing and directing fluid to the first or second outlet responsive to fluid entering the inlet; and  
a selectable pressure controller, mounted adjacent to the second outlet, allowing a user to select at least a first or second fluid speed for a flow of fluid exiting the housing.

11. The fluid flow direction valve of claim 10 wherein the pressure controller comprises a securable plate.

12. The fluid flow direction valve of claim 11 wherein the plate includes a first bore having a diameter smaller than a diameter of said second outlet.

13. The fluid flow direction valve of claim 12 wherein the plate includes a second bore having a diameter equal to the diameter of said second outlet.

14. The fluid flow direction valve of claim 12 wherein a ratio of the diameter of the second outlet to the diameter of the first bore is about 1:6 to 1:4 to 1.

5           15. The fluid flow direction valve of claim 10 wherein the pressure controller includes a flow control structure on the plate.

16. The fluid flow direction valve of claim 15 wherein the flow control structure is a conical structure.

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17. An apparatus, comprising:

a housing having an inlet coupled to a fluid supply, a first outlet and a second outlet;

15           a valve structure positioned in the housing and directing fluid to the first or second outlet responsive to fluid entering the inlet; and

means, mounted adjacent to the second outlet, for selecting at least a first or second fluid speed for a flow of fluid exiting the housing.

18. The apparatus of claim 17 wherein the means comprises a  
20           securable plate.

19. The apparatus of claim 18 wherein the plate includes a first bore having a diameter smaller than a diameter of said second outlet.

25           20. The apparatus of claim 17 wherein the means is a conical structure